

Title (en)  
REFRIGERATION CYCLE DEVICE

Title (de)  
KÄLTEKREISLAUFVORRICHTUNG

Title (fr)  
DISPOSITIF À CYCLE FRIGORIFIQUE

Publication  
**EP 3690356 A4 20201014 (EN)**

Application  
**EP 17926949 A 20170926**

Priority  
JP 2017034673 W 20170926

Abstract (en)  
[origin: US2020191447A1] In an operation mode in which an indoor heat exchanger is used as a condenser, a refrigeration cycle apparatus changes to an operation state in which a water heat exchanger provided to a hot water storage tank is used as an evaporator and refrigerant flowing through the water heat exchanger is evaporated by heat generated by a heat source such as an electric heater, under a low outdoor air temperature condition.

IPC 8 full level  
**F25B 29/00** (2006.01); **F25B 30/02** (2006.01)

CPC (source: EP US)  
**F25B 13/00** (2013.01 - EP US); **F25B 49/02** (2013.01 - EP US); **F25B 47/02** (2013.01 - US); **F25B 2313/003** (2013.01 - EP); **F25B 2313/009** (2013.01 - EP); **F25B 2313/0231** (2013.01 - EP US); **F25B 2313/0233** (2013.01 - EP US); **F25B 2313/02731** (2013.01 - EP); **F25B 2313/02741** (2013.01 - EP US); **F25B 2313/0314** (2013.01 - US); **F25B 2600/2513** (2013.01 - EP US); **F25B 2700/1931** (2013.01 - EP); **F25B 2700/2103** (2013.01 - EP); **F25B 2700/2104** (2013.01 - EP); **F25B 2700/2106** (2013.01 - EP); **F25B 2700/21152** (2013.01 - US)

Citation (search report)

- [X] JP H01314868 A 19891220 - HITACHI LTD
- [XD] WO 2012111063 A1 20120823 - MITSUBISHI ELECTRIC CORP [JP], et al
- [X] JP 2006275343 A 20061012 - TOSHIBA CARRIER KK
- [A] EP 2918949 A1 20150916 - MITSUBISHI ELECTRIC CORP [JP]
- [X] EP 2669605 A1 20131204 - MITSUBISHI ELECTRIC CORP [JP]
- [X] EP 2767773 A1 20140820 - DAIKIN IND LTD [JP]
- See references of WO 2019064332A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**US 11268737 B2 20220308**; **US 2020191447 A1 20200618**; EP 3690356 A1 20200805; EP 3690356 A4 20201014; JP WO2019064332 A1 20200416; WO 2019064332 A1 20190404

DOCDB simple family (application)  
**US 201716638950 A 20170926**; EP 17926949 A 20170926; JP 2017034673 W 20170926; JP 2019545411 A 20170926